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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/896,720

DATE: 10/12/2001

TIME: 11:17:38

Input Set : A:\5853173u.app

Output Set: N:\CRF3\10122001\I896720.raw

3 <110> APPLICANT: SONG, WEN-YUAN
 4 PI, LI-YA
 6 <120> TITLE OF INVENTION: UBIQUITIN LIGASE
 8 <130> FILE REFERENCE: 5853-173
 10 <140> CURRENT APPLICATION NUMBER: 09/896,720
 C--> 11 <141> CURRENT FILING DATE: 2001-09-24 *ok*
 13 <150> PRIOR APPLICATION NUMBER: 60/215,049
 14 <151> PRIOR FILING DATE: 2000-06-29
 16 <160> NUMBER OF SEQ ID NOS: 24
 18 <170> SOFTWARE: PatentIn Ver. 2.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 1353
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Oryza sativa
 25 <400> SEQUENCE: 1

26	atgggtcacg	gtgtcagctg	cgcccgaccc	ggcgacgagc	acgacttctt	ccgggcgggcg	60
27	cagctcgggc	acctcgacgc	cctggccgcc	ctoctcgccg	ccgacccttc	cctcgctcgc	120
28	cgcgccaccc	tctacgaccg	cctctccgtc	ctccacatcg	ccgcccggaa	tggccgcac	180
29	gaggtgctct	ccatgttctt	ggatcgcggg	ggcgccggcg	acgcggtgaa	tcggcacaag	240
30	cagacgccc	tgatgctcgc	ggccatgcac	ggcaagatcg	actgctgct	caagctcctc	300
31	caggccgacg	caaatactt	gatgttcgac	tcggtgcacg	cgaggacctg	cctccaccac	360
32	gcggcgctact	acggccacgt	cgactgcctg	caggccatcc	tcgcccggcg	gcagaccacg	420
33	ccggtggccg	actcatgggg	tttcgcccgg	ttcgtcaacg	tcagggacga	ccacggcgcc	480
34	actccgctgc	atctcgcgcc	caggcagggg	cgccgggggt	gcgtgcaggt	gttgctggag	540
35	aacggcgcca	ttgtgtcgcc	tttgacagga	tcatatggct	tccttggaag	caogtcgctt	600
36	catttgctg	ctcgtagcgg	gaacttggat	tgcacagga	agctgcttgc	ctggggagct	660
37	gatcggtcc	aaagggattc	ggctgggaga	attccctatt	ctgttgcgct	gaaacggaac	720
38	catggagcat	gtgcagcttt	gctgaaccct	acatcagcag	agcccatggt	gtggccatcc	780
39	ccacttaagt	tcacagtgga	gcttgaacca	gaagctaagg	ctctcctgga	agcagctctg	840
40	atggaagcca	acagggagag	ggagaagaaa	atcctgaatg	gcacaaagta	ctccctgcca	900
41	tccccttcgc	ccggtgatga	cagtgcggat	gacgatgcac	gctcagaggt	gagcgacacg	960
42	gagctttgct	gcacatgctt	cgaccaggct	tgcaccattg	aggtgcaaga	ctgtggacat	1020
43	caaatgtgtg	caccgtgcac	gctggcactg	tgctgtcaca	acaaacccaa	tccgacgacc	1080
44	ctgacaccgc	cctcaccggc	ctgcccattc	tggcggggca	gcacatcacg	gctgggtggtg	1140
45	gccccaaaca	ggtctgcttg	tgatcctgac	aagccgtcat	ccctgcagct	cacccggaag	1200
46	cggtcgcgtc	gatctcaca	cctcagtgag	ggcagcagca	gcttcaaagg	gctacottcg	1260
47	gccatgggct	ccttctcaaa	gcttggccgt	ggctcgagcc	gcacggcgga	cagtgacagc	1320
48	agcaacctgg	acaagcctga	gcacgatcta	tga			1353

51 <210> SEQ ID NO: 2
 52 <211> LENGTH: 450
 53 <212> TYPE: PRT
 54 <213> ORGANISM: Oryza sativa
 56 <220> FEATURE:
 57 <221> NAME/KEY: MOD_RES
 58 <222> LOCATION: (258)
 59 <223> OTHER INFORMATION: Any amino acid
 61 <400> SEQUENCE: 2

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62 Met Gly His Gly Val Ser Cys Ala Arg Thr Gly Asp Glu His Asp Phe
63   1           5           10           15
65 Phe Arg Ala Ala His Leu Gly Asp Leu Asp Ala Leu Ala Ala Leu Leu
66           20           25           30
68 Ala Ala Asp Pro Ser Leu Ala Arg Arg Ala Thr Leu Tyr Asp Arg Leu
69           35           40           45
71 Ser Val Leu His Ile Ala Ala Ala Asn Gly Arg Ile Glu Val Leu Ser
72   50           55           60
74 Met Phe Leu Asp Arg Gly Ala Pro Pro Asp Ala Val Asn Arg His Lys
75 65           70           75           80
77 Gln Thr Pro Leu Met Leu Ala Ala Met His Gly Lys Ile Asp Cys Val
78           85           90           95
80 Leu Lys Leu Leu Gln Ala Asp Ala Asn Ile Leu Met Phe Asp Ser Val
81           100          105          110
83 His Ala Arg Thr Cys Leu His His Ala Ala Tyr Tyr Gly His Val Asp
84           115          120          125
86 Cys Leu Gln Ala Ile Leu Ala Ala Ala Gln Thr Thr Pro Val Ala Asp
87   130          135          140
89 Ser Trp Gly Phe Ala Arg Phe Val Asn Val Arg Asp Asp His Gly Ala
90 145           150          155          160
92 Thr Pro Leu His Leu Ala Ala Arg Gln Gly Arg Pro Gly Cys Val Gln
93           165          170          175
95 Val Leu Leu Glu Asn Gly Ala Ile Val Ser Ala Leu Thr Gly Ser Tyr
96           180          185          190
98 Gly Phe Pro Gly Ser Thr Ser Leu His Leu Ala Ala Arg Ser Gly Asn
99           195          200          205
101 Leu Asp Cys Ile Arg Lys Leu Leu Ala Trp Gly Ala Asp Arg Leu Gln
102   210          215          220
104 Arg Asp Ser Ala Gly Arg Ile Pro Tyr Ser Val Ala Leu Lys Arg Asn
105 225           230          235          240
107 His Gly Ala Cys Ala Ala Leu Leu Asn Pro Thr Ser Ala Glu Pro Met
108           245          250          255
W--> 110 Val Xaa Pro Ser Pro Leu Lys Phe Ile Ser Glu Leu Glu Pro Glu Ala
111           258 260           265           270
113 Lys Ala Leu Leu Glu Ala Ala Leu Met Glu Ala Asn Arg Glu Arg Glu
114           275          280          285
116 Lys Lys Ile Leu Asn Gly Thr Lys Tyr Ser Leu Pro Ser Pro Ser Pro
117   290          295          300
119 Gly Asp Asp Ser Ala Asp Asp Ala Cys Ser Glu Val Ser Asp Thr
120 305           310          315          320
122 Glu Leu Cys Cys Ile Cys Phe Asp Gln Ala Cys Thr Ile Glu Val Gln
123           325          330          335
125 Asp Cys Gly His Gln Met Cys Ala Pro Cys Thr Leu Ala Leu Cys Cys
126           340          345          350
128 His Asn Lys Pro Asn Pro Thr Thr Leu Thr Pro Pro Ser Pro Ala Cys
129           355          360          365
131 Pro Phe Cys Arg Gly Ser Ile Ser Arg Leu Val Val Ala Gln Thr Arg
132   370          375          380
134 Ser Ala Cys Asp Pro Asp Lys Pro Ser Ser Leu Gln Leu Thr Arg Lys

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135 385          390          395          400
137 Arg Ser Arg Arg Ser His Asn Leu Ser Glu Gly Ser Ser Ser Phe Lys
138          405          410          415
140 Gly Leu Pro Ser Ala Met Gly Ser Phe Ser Lys Leu Gly Arg Gly Ser
141          420          425          430
143 Ser Arg Met Ala Asp Ser Asp Ser Ser Asn Leu Asp Lys Pro Glu His
144          435          440          445
146 Asp Leu
147          450
150 <210> SEQ ID NO: 3
151 <211> LENGTH: 29
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer ✓
158 <400> SEQUENCE: 3
159 gtcgaccaga tctcataaga gaagaaaga 29
162 <210> SEQ ID NO: 4
163 <211> LENGTH: 31
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer ✓
170 <400> SEQUENCE: 4
171 gtcgacgaat gaaatcagtt gtgaagggtta c 31
174 <210> SEQ ID NO: 5
175 <211> LENGTH: 35
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer ✓
182 <400> SEQUENCE: 5
183 ggatccgtcg accacaagag aactaaaaag ggagc 35
186 <210> SEQ ID NO: 6
187 <211> LENGTH: 42
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer ✓
194 <400> SEQUENCE: 6
195 ggatccgtcg accccgggca gaagtcgadc tgaagtgtgg ca 42
198 <210> SEQ ID NO: 7
199 <211> LENGTH: 30
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer ✓
206 <400> SEQUENCE: 7
207 ggatccatga tatccatggg tcacggtgtc 30

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210 <210> SEQ ID NO: 8
211 <211> LENGTH: 31
212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
218 <400> SEQUENCE: 8
219 cgggatccga tatcagatgc agcaaagctc c 31
222 <210> SEQ ID NO: 9
223 <211> LENGTH: 30
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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234 <210> SEQ ID NO: 10
235 <211> LENGTH: 24
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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243 cagaagtcga tctgaagtgt ggca 24
246 <210> SEQ ID NO: 11
247 <211> LENGTH: 30
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
254 <400> SEQUENCE: 11
255 ggatccatga tatccgatgc atgctcagag 30
258 <210> SEQ ID NO: 12
259 <211> LENGTH: 30
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
266 <400> SEQUENCE: 12
267 ggatccatga tatcgaggat gatgcggcga 30
270 <210> SEQ ID NO: 13
271 <211> LENGTH: 28
272 <212> TYPE: DNA
273 <213> ORGANISM: Artificial Sequence
275 <220> FEATURE:
276 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
278 <400> SEQUENCE: 13
279 gaattctcta gaccggggca gcattctca 28
282 <210> SEQ ID NO: 14

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Input Set : A:\5853173u.app
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283 <211> LENGTH: 29
284 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
290 <400> SEQUENCE: 14
291 actagtggat cctttctgat accaacgga                                29
294 <210> SEQ ID NO: 15
295 <211> LENGTH: 28
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
302 <400> SEQUENCE: 15
303 gaattcagat ctccggggca gcatctca                                28
306 <210> SEQ ID NO: 16
307 <211> LENGTH: 29
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
314 <400> SEQUENCE: 16
315 actagtgata tctttctgat accaacgga                                29
318 <210> SEQ ID NO: 17
319 <211> LENGTH: 17
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
326 <400> SEQUENCE: 17
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330 <210> SEQ ID NO: 18
331 <211> LENGTH: 17
332 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
338 <400> SEQUENCE: 18
339 ggtgcatgct ccaatgg                                           17
342 <210> SEQ ID NO: 19
343 <211> LENGTH: 21
344 <212> TYPE: DNA
345 <213> ORGANISM: Artificial Sequence
347 <220> FEATURE:
348 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
350 <400> SEQUENCE: 19
351 gcgctgaaac ggaaccatgg a                                       21
354 <210> SEQ ID NO: 20
355 <211> LENGTH: 22

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VERIFICATION SUMMARY

DATE: 10/12/2001

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TIME: 11:17:39

Input Set : A:\5853173u.app

Output Set: N:\CRF3\10122001\I896720.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2